Progress Report for Applied Economics

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After losing assets and livelihoods, the Syrian refugee population in Lebanon continuously faces increasing socioeconomic hardships that compromise their ability to meet their basic needs (Lyons *et al.*, 2021). Consequently, a multi-purpose cash assistance programme (MCAP) was established in November 2017 by the World Food Programme (WFP), United Nations High Commissioner for Refugees (UNHCR), and non-governmental organisations (NGO) to elevate some adversities of the most economically vulnerable Syrian refugee households. Over a 12-month cycle, eligible households receive a monthly unconditional and unrestricted direct cash transfer of approximately $175 per household to stabilise or improve access to food and basic needs.

To further specify the eligibility of the programme, Syrian refugee households are selected based on a proxy means testing (PMT) formula that provides a score to predict household expenditures using a set of socio-demographic characteristics from the UNHCR registration database. According to the disbursement protocol, all households below the cut-off score are offered multi-purpose cash (MPC), while all those above it are not (UNHCR, 2021).

1 Key Research Paper

"The impact of cash transfers on Syrian refugees in Lebanon: Evidence from a multidimensional regression discontinuity design" evaluates the causal effect of MCAP over multiple periods and across multiple dimensions of the well-being of Syrian refugees (Salti *et al.*, 2022). The reason behind choosing this paper as a base for the summer project is that it has provided a new perspective within the unique context of the Middle East. In addition, this recent publication has made a great contribution to the literature that studies the impact of receiving long-term cash assistance and the causal effect of beneficiaries being discontinued from the programme which allows for further expansions if the proposed improvement succeeds.

Focusing on two MCAP cycles (November 2017 and November 2018), data was collected through two waves of household surveys in February/March 2019 and July/August 2019. The sampling followed a standard probability proportional to size to maintain representativeness of the population of Syrian refugees within the MCAP eligibility cut off score intervals in three regions (Mount Lebanon, North Lebanon, and Bekaa[1]).

The MPC transfers from 2017 and 2018 were taken as two separate treatments because of an update in the formula for the household PMT score. More clearly, the authors have ended up with two treatment arms and two assignment variables which created four distinct treatment groups; (1) discontinued recipients (received cash

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[1]During the study period, these three regions composed 85 percent of all Syrian refugees residing in Lebanon.

for 12 months then got discontinued in the next cash cycle), (2) short-run cash recipients (12 months or less), (3) long-run recipients (more than 12 months), and (4) non-beneficiary eligible households.

A sharp multidimensional regression discontinuity design (RDD) was used to identify the causal effects. The only discontinuity between households on either side of the cutoff is their treatment status as the authors ran smoothness tests where observable characteristics were treated as the outcome. Moreover, there is excludability in terms of no known relevant things changing at the PMT score cut-off. Lastly, the cut-off is exogenously determined because households are unable to manipulate it - the information is unpublicized and the PMT calculation is updated yearly - which is also confirmed by a McCrary density test. Hence, the RDD identification assumptions hold.

The main results showed most significant impacts focus on the long-term cash beneficiaries. More specifically, there was improvement in expenditure categories and an increase of the likelihood to live in residential housing, as opposed to non-residential housing or informal tented settlements for the long-run group. In addition, compared to short-run and non-recipients, the long-run recipients significantly reduce adult labor market participation. As for the education section, positive effects of MCAP on enrollment in formal schooling and a decrease in non-formal were found. With this, there is a significantly lower rate of child labor for long-run group MCAP beneficiaries compared to both the short-run and the control.

Although Lebanon is experiencing an ongoing financial crisis since August 2019, which was exacerbated by both the COVID-19 pandemic and the Beirut port explosion in 2020, this paper remains relevant to the study of evaluating the important impact of unconditional cash transfer programmes driving policy making around the world.

Another key strength is the compiled data to run the study, one which had not been conducted in Lebanon and will be used for my summer project. Trained enumerators visited households across the three regions and conducted the 45-minute-long surveys which contained information on both the household and individual levels. The questionnaire is comprehensive in terms of covering diverse modules including but not limited to demographic characteristics, employment, education, health, monthly household expenditures, and food security.

The published paper focuses on the big picture of the impact of MPC where a handful of outcomes were left out of the results section with no specific reasoning. My plan is to re-visit some of these outcomes because even insignificant results may still improve our understanding of humanitarian aid effects. Additionally, these direct effects may vary depending on individual characteristics within the household which could help in a better understanding of the mechanism behind it. This may be tough to evaluate since behavior changes may be based on ex-post decision observations which the data does not hold and calls for a more qualitative assessment. However, there are some time invariant characteristics like gender, age, and education of the head of household which could have been looked into that I plan to integrate with my paper.

On my to do list is looking into why the sample summary statistics table is shown by the treatment conditions. Although pre-treatment characteristics are not required for an RDD since we work with cross-sectional data, there is some variation in marital status, age, and household size between treatment groups which could be a possibility to explore. Additionally, I could not find how the authors clustered their standard errors; it could have been using

robust errors done at the individual level or an alternative method depending on how the survey is administered. I will be following up with the authors to understand how they have clustered to help me grip what the correct way is for the RDD I will employ.

2   Proposed Improvement

In a refugee population context, cash-based interventions restore a sense of independence and productiveness among beneficiaries allowing them to live with more dignity through deciding how to spend their money (UN-HCR, 2012). Through a similar stream, my summer project will examine the impact of MCAP on mental health and gender power dynamics within households as far as decision making is concerned.

The project will use the published report's dataset focusing on the November 2018 cash cycle only. The reason behind this is to simplify the econometric approach especially that the inter-household decision making and mental health modules were only asked in the July/August 2019 household surveys. It will be interesting to investigate a different outcome which explores the mental health status and whether there is a gender dynamic shift in taking decisions between households who benefit from the MCAP (treatment group) relative to those who don't (control).

Focusing on the decision-making module, the summer project will aim to possibly highlight gender issues in an understudied region where citizens tend not to discuss. The questionnaire asks who, in the past 6 months, generally had the last word and to what extent did the respondent feel they could make their own personal decisions regarding the following aspects of household life: (1) whether the female should work to earn money or not and the acceptable wage, (2) what to prepare for daily meals, (3) visiting family/relatives or friends, (4) major and minor household expenditures (5) whether or not to use family planning (contraceptives/birth control) to space or limit births, (6) he children's education, (7) and where to obtain health care/advice. Respondents could choose answers between either mainly husband, mainly wife, jointly, husband/male with another person, wife/female with another person, or someone outside the household/other.

As for the mental health section, the questions asked how much in the past 6 months did the respondent feel that they are a happy person, calm and reassured, very angry, upset, and depressed. These 5 questions are validated by the Mental Health Inventory (MHI-5) which is known to be a good predictor of anxiety, depression, behavioural control and general distress (Veit and Ware, 1983).

In principle, the simplification of the econometric approach is towards a regular sharp regression discontinuity design which we have learned during the course of this master's programme. As previously stated, all those below the cut-off are offered the cash transfer, while all those above it are not. Conclusively, the aim is to evaluate the causal effect of the multi-purpose cash transfer to Syrian refugee households on the different aspects of decision making and mental health outcomes where the assignment to treatment is determined by the PMT score that has ranked households from most to least vulnerable.

Finally, the resulting findings of each specified outcome variable will be an average causal effect of the cash transfer at the discontinuity with the main assumption that those right above and below the cut-off score are identical and should only differ in their access to the programme.

References

Lyons, A., J. Kass-Hanna, A. Montoya Castano, and A. Greenlee. 2021. A multidimensional approach to measuring vulnerability to poverty of syrian refugees in lebanon. *Available at SSRN 3787795*.

Salti, N., J. Chaaban, W. Moussa, A. Irani, R. Al Mokdad, Z. Jamaluddine, and H. Ghattas. 2022. The impact of cash transfers on syrian refugees in lebanon: Evidence from a multidimensional regression discontinuity design. *Journal of Development Economics* 155:102803.

UNHCR 2012. An introduction to cash-based interventions in unhcr operations. `https://www.unhcr.org/uk/515a959e9.pdf`.

UNHCR 2021. Fact sheet: Cash assistance - lebanon. `https://reporting.unhcr.org/sites/default/files/Lebanon%20cash%20fact%20sheet%20May%202021.pdf`.

Veit, C. T., and J. E. Ware. 1983. The structure of psychological distress and well-being in general populations. *Journal of consulting and clinical psychology* 51 (5): 730.